

**COMPUTER
SPECIALIST
GS-0334-11**

**INFORMATION
SYSTEMS**

I. POSITION AND ORGANIZATION INFORMATION**Position:**

Computer Specialist, GS-0334-11

Purpose of position:

The work of the position involves analytical and evaluative duties related to computer networks and/or telecommunications with primary knowledge requirements of information processing methodology, information technology, computer capabilities, and processing techniques.

Organization:

Information Systems Division

Organization goals:

This position serves as the Information Technology Team Leader. IT Support includes Asset Management, C41 Planning, Systems Analysis and Web Page approval.

II. MAJOR DUTIES**A. Duty (Critical):**

Develops and coordinates local information processing technical standards, procedures, and regulatory guidance. (11%)

Tasks:

1. Develops local guidance and procedures for implementation of mandatory technical standards.
2. Works with functional managers to evaluate the impact of proposed standards and procedures on the accomplishment of activity goals and objectives.
3. Disseminates standards to users, provides training and implementation assistance, and reviews and prepares recommendations concerning all requests for waivers of mandatory standards.
4. Evaluates the need for changes in local policies or procedures.
5. Reviews all Web page submissions, grants approval for implementation or makes recommendation necessary for implementation.

Selected Staffing KSAs:

A1, A2, A3

B. Duty (Critical):

Serves as a member of a team responsible for the planning and acquisition of designated information technology assets, i.e. computer hardware/software, network, and reuse assets. Conducts extensive research and performs analytical studies in support of selection and acquisition actions to support functional area requirements. (11%)

Tasks:

1. For designated technical management areas, plans and coordinates all phases of the acquisition, implementation, and integration of the information technology assets.
2. Conducts extensive research and analytical studies and develops specifications, justifications, and economic analyses in support of selection and acquisition actions.
3. Reviews the solicitation package and coordinates with the Contracting Office to ensure completeness and legal sufficiency.
4. Serves as an authorized representative of the Contracting Officer and is directly responsible for providing technical information for the procurement of information technology assets and service. Reviews technical specifications for bid solicitations.
5. Assists in ensuring vendor compliance with contract provisions. Provides interpretation of technical provisions of contracts and informally discusses technical differences between vendors.
6. Reviews proposals to continue, expand, or delete assets and recommends appropriate disposition.

Selected Staffing KSAs:

A4, A5

C. Duty (Critical):

Implements new system hardware and software and develops local operating procedures. Monitors the ongoing operation of the network. (11%)

Tasks:

1. Receives network, communications, and related operating systems from various sources; maintains an inventory of all network hardware and software.
2. Installs, configures, and trouble-shoots network and application server hardware, operating system software, and peripheral network equipment such as routers, bridges, cabling system, network interface cards, modems, multiplexers, and concentrators.
Changes the components of existing equipment for efficient operation.
3. Develops and maintains local procedures for networks, system operations, and product assembly and installation.
4. Implements all network operating system and/or application software and maintains contact with software suppliers to insure that current releases of software products are in use.
5. Conducts testing to insure operability, efficiency, and compliance with existing standards.

6. Monitors operation of the network and ensures that hardware and software are functioning properly and that operation standards are met. Reviews, evaluates, and fine tunes components to achieve peak efficiency within the overall network connectivity.
7. Function tests the hardware and software to resolve technical problems and makes the appropriate on-site repairs.
8. Provides ongoing support, resolution of problems, and recovery of operating malfunctions involving various hardware components and software failures.
9. Performs system backups to insure expedient restoration of the data base for the respective network equipment.
11. Participates with user support personnel to train office personnel and functional end users on use of office automation computers, local and wide area networks, and other automated tools.
12. Recommends and prepares operating policies and procedures for networks, system operations, and product assembly and installation.
13. Maintains technical proficiency by attending expositions and meetings and through review of current communications and computer literature.

Selected Staffing KSAs:

A2, A3, A6

D. Duty (Critical):

Analyzes equipment and software reliability and utilization reports to identify and correct problem areas and to establish computer and telecommunications performance levels. (11%)

Tasks:

1. Conducts analyses of network usage, user complaints, traffic interruptions, hardware and software capabilities, and other relevant factors.
2. Identifies adverse trends, ineffective practices or procedures, equipment shortcomings, etc.
3. Recommends methods and procedures and coordinates corrective action to optimize utilization of present equipment.
4. Uses benchmarks and performance measurement and evaluation data, in conjunction with modeling and simulation techniques, in planning for increased capacity and for supporting any additional workloads.
5. Develops recommendations or proposals involving a variety of specialized systems and state-of-the-art enhancements designed to meet unique local requirements and improve operational efficiency.
6. Works with technical support personnel in resolving critical problems.

Selected Staffing KSAs:

A3

E. Duty (Critical):

Performs feasibility studies in order to develop or modify information systems to meet user network and/or telecommunication requirements. Studies do not contain unprecedented problems or other complicating features typical of senior level assignments. (11%)

Tasks:

1. Provides technical advice to users.
2. Examines and evaluates alternative means of satisfying user requirements.
3. Suggests technically feasible approaches and makes recommendations regarding the most effective and efficient automation approaches.

Selected Staffing KSAs:

A1, A5

F. Duty (Critical):

Reviews proposals for change which consist of objectives, scope, and users' expectations. Work typically requires employee to determine applicability of established methods. (11%)

Tasks:

1. Using customer input, gathers facts about the nature of the work involved in the user's application area, the work flow, the processing actions, and the work product(s).
2. Analyzes data and prepares a project synopsis which compares alternatives in terms of cost, time, necessary equipment and staff. Recommends a course of action.

Selected Staffing KSAs:

A1, A3

G. Duty (Critical):

Performs in-depth analysis of automated and manual systems related to network and/or telecommunications design. (11%)

Tasks:

1. Determines whether or not existing systems can be used or changed.
2. Prepares specifications indicating principal computer communications components of system and format required for implementation by computer programmers. Specifies inputs and outputs, appropriate data structure, module interface plans, detailed layout of files, and test plans.
3. Designs the physical structure of required databases considering factors such as access methods, frequency of access, storage media, data volatility, search strategies to be employed. Designs system to support options for

several simultaneous interactive users. Documents standard data elements.

4. Determines the physical storage requirements based on the volume of data, data relationships, size of records, anticipated growth, access methods, and data compression techniques.

5. Performs consultation and research to determine common and unique requirements, to establish standardized terms and data elements for uniform identification by all users, and to select and develop a system design to service users individually or as a group.

Selected Staffing KSAs:

A1, A2, A3

H. Duty (Critical):

Performs a wide variety of tasks necessary to manage new and on-going automation projects. (11%)

Tasks:

1. Monitor status of individual projects
2. Prepare and present reports to higher level management.
3. Coordinate unrelated resources to ensure all necessary resources are available at the required time.
4. Make recommendations for realignment of internal resources necessary to meet project requirements and due dates.

Selected Staffing KSAs:

I. Duty (Critical):

Performs supervisory duties. (12%)

Tasks:

1. Plans work to be accomplished by subordinates, sets and adjusts short term priorities, and prepares schedules for completion of work.
2. Assigns work to subordinates based on priorities, the difficulty of the work to be performed, and the capabilities of employees.
3. Finds ways to improve production or increase the quality of the work directed.
4. Develops performance standards for subordinates.
5. Evaluates work performance of subordinates.
6. Delegates or exercises leave authority.
7. Interviews candidates for positions in the unit. Recommends appointment,

promotion or reassignment to such positions.

8. Identifies developmental and training needs of employees and provides for or arranges needed development and training.
9. Gives advice, counsel or instruction to employees on both work and administrative matters.
10. Hears and resolves complaints from employees, referring group grievances and more serious unresolved complaints to a higher level supervisor or manager.
11. Exercises significant responsibilities in dealing with officials of other units or in advising higher level management officials.
12. Plans and schedules ongoing production-oriented work on a quarterly and annual bases, or directs assignments of similar duration. Adjusts staffing levels or work procedures within the unit(s) to accommodate resource allocations decisions made at higher echelons. Justifies the purchase of new equipment. Improves work methods and procedures used to produce work products. Oversees development of technical data, estimates, statistics, and other information useful to higher level managers in determining which goals and objectives to emphasize. Decides the methodologies to use in achieving work goals and objectives, and in determining other management strategies.
13. Recommends awards or bonuses for nonsupervisory personnel and changes in position classification, subject to approval by higher level officials, supervisors, or others.
14. Effects minor disciplinary measures, such as warnings and reprimands, recommending other action in more serious cases.

Selected Staffing KSAs:

J. Other Work Requirements

1. The employee must obtain and maintain a Secret clearance.
2. The employee may be recalled to duty.

III. KNOWLEDGES, SKILLS AND ABILITIES (KSAs)

A. Selected Staffing KSAs:

1. Ability to apply a knowledge of systems analysis and design methodologies
2. Knowledge of information processing standards and procedures
3. Ability to apply knowledge of current automation technology and practices
4. Knowledge of computer systems acquisition regulations, practices, and procedures
5. Knowledge of and ability to apply software reuse techniques
6. Knowledge of computer network administration

B. Basic Training Competencies:

1. Ability to apply a knowledge of systems analysis and design methodologies

2. Knowledge of information processing standards and procedures
3. Ability to apply knowledge of current automation technology and practices
4. Ability to communicate orally
5. Ability to communicate in writing
6. Knowledge of computer systems acquisition regulations, practices, and procedures
7. Knowledge of and ability to apply software reuse techniques
8. Knowledge of communications connectivity requirements
9. Knowledge of computer network administration
10. Knowledge of the objectives, overall design, and operating characteristics of related hardware and software
11. Ability to formulate programming specifications
12. Knowledge of data and process modeling methodology
13. Ability to apply knowledge of programming languages and techniques
14. Ability to inspire, motivate and guide others toward goal accomplishment. Leadership ability, including the ability to coach, mentor and challenge subordinates; ability to adapt leadership style to a variety of situations; and ability to model high standards of honesty, integrity, trust, openness, and respect for the individual by applying these values to daily behaviors.
15. Knowledge of and ability to apply procedures, requirements, regulations, and policies related to specialized expertise in the work of the unit (such as engineering, accounting, supply, etc.), including the ability to maintain credibility with others on technical matters.
16. Ability to recognize and analyze problems, conduct research, summarize results, and make appropriate recommendations
17. Skill in interpersonal relations

IV. CLASSIFICATION FACTORS

Factor 1. Knowledge

Level 1-7 (1250 Points)

1. - Knowledge of agency information processing standards, policies, and procedures to analyze and advise managers on systems matters and evaluate the need for changes in existing policies and procedures.
 2. - Knowledge of equipment characteristics, computer techniques, requirements, methods, and procedures to include familiarity with approaches used by organizations in other agencies and/or the private sector in order to evaluate alternatives and provide advice and assistance to managers.
 3. - Knowledge of systems design and development techniques and agency policies and procedures. Skill in relating aspects and parts of a project to the overall needs of the organizations served. Knowledge of new or revised policies, practices, and technical management guidelines to provide advisory services, consultation, technical assistance, and/or training.
 4. - Knowledge of the principles, policies, and practices of acquisition and program management. Uses this knowledge to serve as a technical specialist involved in the planning, organization, and managing of systems acquisition.
- Ability to ensure overall compliance with contractual requirements and hardware specifications.

5. - General knowledge of the mission, objectives, terminology, and management practices in the activity, the agency, and the department to recognize probable areas of interaction and overlap between proposed and existing systems.
6. - Ability to identify needed network system modifications and to relate all aspects of the work to the network and user requirements.
7. - Detailed and specific knowledge of the work processes, data models, work rules, file/database designs, and computer and operating procedures applicable to the network operation.
8. - Knowledge of state-of-the-art practices of data automation to advise on alternative approaches in application system development and/or problem resolution related to networks and/or telecommunications.
9. - Knowledge of hardware and software systems network operations function, communication protocols, diagnostic tools to recover data, analyze customer problems, and provide assistance.
- Knowledge of technical microcomputer/mainframe integration and communication and/or distributed processing techniques to resolve questions related to telecommunications equipment and connectivity.
10. - Understanding of the capabilities and limitations of the activity's computer equipment configuration, system software, utility programs and programming aids available in order to carry out network and/or telecommunications programs and projects and coordinate efforts with others affected in the organization.
11. - Knowledge of systems analysis and design techniques including data and process modeling, alternative design approaches, configuration management, and computer equipment requirements related to networks and telecommunications to carry out studies to advise on the merits of proposed applications, designs, and design changes.
12. - Knowledge of department, agency, command, and installation ADP procedures and standards as they relate to limitations on design approaches, coordination requirements, programming specifications, and documentation related to networks.
13. - Skill in evaluating innovative approaches in the formulation of programming or systems specifications.
14. - Knowledge of advanced programming techniques and higher level computer languages to complete program development for assigned systems.

Factor 2. Supervisory Controls**Level 2-4 (450 Points)**

The supervisor provides general guidance, as to scope and priorities of projects in the assigned area and, in consultation with the employee, determines time-frames and possible shifts in staff assignments. Employee

plans, organizes, and carries out assignments, coordinates work with others, determines the approach and methodology to be used, and keeps the supervisor apprised of potential problems. The employee clears with the supervisor approaches that may have potential policy impact. Completed work is reviewed for its effectiveness in meeting user requirements, accuracy of estimated time frames and projected problem areas, and effectiveness in coordinating the project with other groups.

Factor 3. Guidelines**Level 3-3 (275 Points)**

Guidelines primarily consist of Federal, department, agency and local regulations, policies, standards, and objectives, and existing systems which provide useful models. The employee uses judgment in adapting design approaches successfully used in precedents to the assigned projects. Judgment is required in relating precedent approaches to specific situations.

Factor 4. Complexity**Level 4-4 (225 Points)**

The work involves independent accomplishment of several stages in the automation of a work process, including participation in defining the problem, designing a solution, and system testing. A variety of techniques and methods are needed to evaluate alternatives. Deciding what needs to be done typically involves assessment of situations complicated by conflicting requirements which must be analyzed to determine the applicability of established methods. Technical approaches often must be tested and projections made. Consideration must be given to probable areas of future change in system design, equipment layout, and other factors that will affect decisions. Although data provided by previous users and/or tests usually do not provide conclusive results about the desirability of the proposals in the local environment, proposals seldom are unprecedented in nature since they are typically modifications or new releases based on approaches already known to work.

Factor 5. Scope and Effect**Level 5-3 (150 Points)**

The work involves formulating recommendations, analyzing a variety of unusual problems, questions, or conditions associated with networks and related systems. The work affects a wide range of customers using locally designed and/or standard systems. Work products primarily support local users.

Factor 6. Personal Contacts**Level 6-3 (60 Points)**

Personal contacts include other analysts and programmers, and functional area users in other organizations within the activity. In addition, contacts often take place with computer personnel of other agencies, representatives of professional associations, equipment or system software vendors, and contractors. On an irregular basis contacts may also include the head of the employing agency or program officials several managerial levels above the employee.

Factor 7. Purpose of Contacts**Level 7-2 (50 Points)**

The purpose of contacts is to plan, coordinate, advise on work efforts, or to resolve problems. Occasionally makes presentations to users and other ADP personnel to persuade them to use certain specific technical methods and procedures.

Factor 8. Physical Demands**Level 8-2 (20 Points)**

The work requires some physical exertion such as recurring activities such as bending crouching, stooping, stretching, reaching, and lifting of moderately heavy objects such as boxes of project files.

Factor 9. Work Environment Level 9-1 (5 Points)

The work is performed in a typical office setting. Special safety precautions are not required.

B. Supervisory grading criteria

Factor 3 - Supv. & Mgrl. Auth. Exercised Level 3-2 (450 Points)

This position accomplishes work through the technical and administrative direction of others, including assigning and reviewing work, approving leave, and performing other supervisory functions, as detailed in the duties section of this document.

Factor 5 - Diff. of Typical Work Directed Level 5-3 (340 Points)

The highest grade which best characterizes the nature of the basic nonsupervisory work of the organization, and which constitutes 25% or more of the workload of the organization, is GS-6.

V. CLASSIFICATION SUMMARY

In this position:

SUPERVISORY WORK - 12%

This work has been evaluated by reference to the Office of Personnel Management General Schedule Supervisory Guide, TS-123, April, 1993.

Factor 1 - PROGRAM:

1A - PROGRAM SCOPE: Level 1A- , 0 Points

1B - PROGRAM EFFECT: Level 1B-

Factor 2 - ORGANIZATIONAL SETTING: Level 2-2, 250 Points

Factor 3 - SUPERVISORY AND MANAGERIAL

AUTHORITY EXERCISED: Level 3-2a,c, 450 Points

Factor 4 - PERSONAL CONTACTS:

4A - NATURE OF CONTACTS: Level 4A- , 0 Points

4B - PURPOSE OF CONTACTS: Level 4B- , 0 Points

Factor 5 - DIFFICULTY OF TYPICAL

WORK DIRECTED: Level 5-3, 340 Points

Factor 6 - OTHER CONDITIONS: Level , 0 Points

Total Points: 1040

Base Level: GS-6

Initial Grade: GS-5 (Range: 855 - 1100) Final Grade: GS-07

The grade level has been adjusted so that the grade of the position is at least one level higher than the base level of work supervised.

Base level is derived from subordinate list below:

Total subordinates: 4

Total subordinates work directly related: 4

GS nonsupervisory work under normal supervision: 4

GS-06: 3

GS-09: 1

Duty A. 11% GS-0334-11 Computer Specialist
Standards Management and Coordination

Duty B. 11% GS-0334-11 Computer Specialist
Acquisition

Duty C. 11% GS-0334-11 Computer Specialist
Network Operations

Duty D. 11% GS-0334-11 Computer Specialist
Network/Telecommunications Analysis

Duty E. 11% GS-0334-11 Computer Specialist
Feasibility Studies

Duty F. 11% GS-0334-11 Computer Specialist
Requirements Analysis

Duty G. 11% GS-0334-11 Computer Specialist
Systems Analysis and Design

Duty H. 11% GS-User defined duty. Not classified by system. The final grade
may or may not be appropriate.
Project Management

Duty I. 12% GS-0000-07 Supervisor (Base level=06)
Supervisory duties.

List of Modified Duties and Factors:

Duty A. has been edited. The final grade may or may not be appropriate.
The factors have not been changed.

Duty B. has been edited. The final grade may or may not be appropriate.
The factors have not been changed.

Duty C. has been edited. The final grade may or may not be appropriate.
The factors have not been changed.

Duty H. has been added.

The classification criteria are contained in the OPM FES Position
Classification Standard for the Computer Specialist Series, GS-334 (TS-106,
dated July 1991).

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Classification Standard for the Computer Specialist Series, GS-334 (TS-106,
dated July 1991).

US OPM Classification Guide for General Schedule Supervisory Positions, dated
April 1998.

GS-11 Point range: 2355 - 2750

Total Point: 2485

Grade: GS-11

VI. CLASSIFICATION REMARKS:

Duty A, B, and C have been edited to clarify the tasks and consolidate
standard coredoc paragraphs (e.g. integrate civilian payroll and accounting
functions). Edits do not impact the grade or classification.